

WHAT IS CLAIMED IS:

1. An electrical wiring device, comprising:
 - a conductive terminal;
 - a resilient cage clamp having a terminal opening adapted to accept the passage therethrough of a portion of the terminal, the cage clamp also having an actuation surface adapted to enlarge the terminal opening when the actuation surface is depressed;
 - a cage clamp actuator located in close proximity to the actuation surface so as to depress said actuation surface when the cage clamp actuator is operated; and
 - an insulating housing partially enclosing the terminal and the cage clamp and configured to retain at least a portion of the actuator;wherein the actuator is adapted for hand-operation in order to depress said actuation surface.
2. The electrical wiring device of Claim 1, wherein the terminal and housing conform to NEMA design standards.
3. The electrical wiring device of Claim 1, further comprising an insulating cover adapted to mate with the housing and to encapsulate the cage clamp, the actuator and to partially enclose the terminal.
4. The electrical wiring device of Claim 3, wherein the actuator further comprises:
 - a rotatable cam adapted to rotate between at least a first cam position and a second cam position, wherein when the cam is in the first cam position, the actuation surface is fully released and wherein when the cam is in the second cam position, the actuation surface is fully depressed; and
 - a cam lever attached to the cam and adapted to rotate the cam into the first and second cam positions.
5. The electrical wiring device of Claim 4, wherein the cover can only be fully mated with the housing when the cam is in the first cam position.
6. The electrical wiring device of Claim 5, wherein the cage clamp and terminal are adapted to conduct up to 10 amps of electrical current.

7. The electrical wiring device of Claim 5, wherein the cage clamp and terminal are adapted to conduct up to 20 amps of electrical current.

8. The electrical wiring device of Claim 5, wherein the cage clamp and terminal are adapted to conduct up to 40 amps of electrical current.

9. An electrical wiring device, comprising:

a blade-type wiring terminal;

a cage clamp in contact with the terminal, wherein the cage clamp is adapted to receive and retain an electrical lead when actuated, and wherein the cage clamp is further adapted to electrically and mechanically couple the wiring terminal with the electrical lead; and

an integral hand-operated actuator in proximity to the clamp and adapted to actuate the cage clamp.

10. The electrical wiring device of Claim 9, wherein the actuator further comprises:

a cam mounted in operable proximity to the cage clamp and having at least first and second cam positions, wherein when the cam is in the first cam position, the cage clamp is fully released and wherein when the cam is in the second cam position, the cage clamp is fully actuated to form an opening adapted to receive a conductor lead; and

a cam lever attached to the cam and adapted to move the cam between the first and second cam positions.

11. The electrical wiring device of Claim 10, further comprising a cover adapted to encapsulate the actuator and the cage clamp, wherein the cover can only be applied to the wiring device when the cam is in the first cam position.

12. The electrical wiring device of Claim 10, wherein the cam further comprises a third cam position, wherein when the cam is rotated to the third cam position, the cage clamp is only partially actuated.

13. A NEMA wiring device comprising;

a plurality of terminals;

a plurality of cage clamps, one cage clamp for each terminal, wherein each cage clamp is in operable contact with one of the plurality of terminals and is adapted to provide a lead connection for its respective terminal.

14. The NEMA wiring device of Claim 13, further comprising an integral, non conductive actuator for each of the plurality of cage clamps, wherein each actuator is adapted to activate its respective cage clamp to allow the insertion therein of a conductive lead so as to make an electrical connection between the lead and the respective terminal.

15. A method of connecting a conductive lead to a terminal in a NEMA wiring device, comprising:

operating a hand-operated actuator integral to the wiring device to open a lead receptacle in a cage clamp housed in the wiring device;

inserting a conductive lead into the lead receptacle formed in the cage clamp;
and

releasing the hand-operated actuator in order to release the cage clamp and secure the lead in the wiring device

16. A method of manufacturing a wiring device, comprising:

molding a blade-shaped terminal;

forming a opening in a middle section of a flat resilient conductor;

forming the conductor generally into a loop with the opening along a middle portion of the loop;

extending the terminal partially through the opening;

forming a nonconductive actuator with a handle adapted to displace a portion of the conductor, wherein the actuator is formed such that is capable of being operated by hand; and

housing the conductor, the terminal and the actuator in an insulative body in a manner such that the terminal is generally parallel with the plane of the loop while extending partially within the opening and such that the actuator is in operable proximity with at least a portion of the resilient conductor;

wherein the body houses the conductor, the terminal and the actuator in a manner such that the resilient conductor rests at a state where the majority of the

opening is misaligned with the terminal, and wherein the resilient conductor can be displaced from its rest position to a position such that the opening is aligned with the terminal to form an opening into which a conductive lead may be inserted, such that when the resilient member is returned to its rest position, it impinges the inserted lead against the terminal.

17. A wiring device that utilizes a cage clamp to connect a lead to a terminal, comprising:

an integral hand-operated actuation means for actuating the cage clamp, wherein when the actuation means is operated the cage clamp is opened to allow the insertion of the lead, and when the actuation means is further operated, the cage clamp secures the lead to the terminal.

18. A NEMA wiring device, comprising:

an electrical terminal;

a cage clamp in contact with the terminal, wherein the cage clamp has a termination opening adapted to accept a lead when the cage clamp is actuated;

multi-position actuation means for actuating the cage clamp in order to prepare the termination opening for acceptance of a lead; and

an insulative body to at least partially retain the terminal, the cage clamp and the actuation means.

19. A NEMA wiring device, comprising hand-operated actuator means integral to the wiring device to open and close a lead receptacle in a cage clamp housed in the wiring device.